Skills and Attributes of Successful Scientists in Pharma and Biotech

Drexel University



Skills and Attributes to be a Successful Researcher in Pharma/Biotech

- Possess significant technical expertise
 - Ph.D. or M.D. with a knowledge base in a relevant biomedical discipline
 - 3+ years of post-doctoral experience with a solid publication record
- Problem solving and trouble shooting skills
 - Ability to solve technical and scientific problems
 - "think outside the box mentality"
- Maintain technical proficiency
 - Be able to develop and implement laboratory/technical procedures
- Maintain knowledge of current published developments
 - Be able to recommend novel and or alternate experimental approaches to advance projects and programs
- Plan and execute the "right/best" experiments to test hypotheses
 - Not the MOST experiments
- Recognize the value of negative data and its impact
- Research, critically assess, and recommend potential new targets
 - A "ground up" exercise; always consider biomarkers



Skills and Attributes

- Collaborate and work effectively with other scientists/ non-scientists in multiple disciplines
 - Highly matrixed, cross functional teams are necessary to meet objectives and timelines
- Critically evaluate/analyze experimental data
 - Provide written and verbal presentations of experimental results in the context of relevant literature findings
- Give and receive constructive criticism while maintaining professionalism
- Have excellent oral and written communication skills
- Excellent time management and organizational skills
 - Ability to meet timelines and deliverables
- Patience and adaptability in a dynamic environment
 - Ability to adapt to changing resource needs, project prioritization and scientific direction.



Advantages of Research in Pharma/Biotech

- Intellectual stimulation in novel *applied and translational* research areas
 - more of a direct impact on the lives of patients
- "Clarity of purpose": Science-driven research within context of pragmatism.
- Collaboration within and between matrixed teams of scientists of different expertise
 - Concerted group effort in the non-linear, dynamic and iterative process of drug discovery
- Working with very talented and resourceful scientists around common purpose
- Superior infrastructure, facilities, equipment, and adequate funds
- Publishing (with IP restrictions) and attending scientific meetings
- More favorable salary, benefits, stock options/grants without fighting for grant funding!

Disadvantages of Research in Pharma/Biotech

- Highly regulated industry considerable scrutiny and oversight
- Intense pressure around timelines and deliverables
 - Science drives everything, but meeting scientific and corporate objectives is essential
- Specialization, but need to focus on multiple areas, multiple genes or molecular targets
 - no longer focused on your own specialized area of research
- Team-oriented working environment success is linked to the team's performance
 - NOT just your own performance "cog in the big wheel"
- Job security and work life balance can be a challenge
 - The industry is dynamic and susceptible to market forces
 - Individual and team productivity does not guarantee security



Obtaining a Research Position in Pharma and Biotech

Network, network, network!

- Reach out to professionals in your area of expertise for coffee/lunch
- Don't forget friends, neighbors, professors

Professional associations

- Join a professional association in your area of expertise—AACR, SITC, ACS, DIA, AAPS, etc. and attend
 the local and national meetings with you resume/CV on hand set up interviews at these
 conferences
- Join the local bio association and attend their meetings, dinners—DE BioScience, LifeSciencesPA
- Jobs are often posted through association job boards, particularly when conferences occur
- Employers also participate in career fairs through conferences

Have a strong online presence

- Utilize LinkedIn—let recruiters find you
- While not all jobs are posted, consider sending your CV to HR or the hiring manager in companies of interest, and apply to the actual postings
- Follow-up on your application/candidacy, but don't become a pain!

Reach out to staffing agencies and recruiters in the pharma/biotech industry

- Many companies must use 3rd party recruiters
- Sometimes you can get in the door by contract positions



Mini-Survey of Active Professionals of Skills Necessary to Succeed in Industry

Respondents

- Biologist, BMS
- Biology Manager, Astra-Zeneca
- Sr. Exec., Takeda
- Chemist, BMS
- Biology Manager, Janssen
- Biology Manager, Incyte
- Program Director, BMS
- Regulatory Affairs Dir., Merck
- Chemist, Merck
- Toxicologist, Biotech
- VP, R&D, Biotech

Ranking

- 1. Communication
- 2. Teamwork
- 3. Leadership
- 4. Time Management
- 5. Adaptability

"From a skills perspective, communication and story-telling are key. They may not realize it, but every job has a sales component. If you want people to align with your ideas, you need to sell it. Also, leading through influence and how to do that effectively is really key in the matrixed environments that we work in." Bill Rote, Sr. VP, Retrophin

